REMARKS

The Applicants would like to thank the Examiner for the quick and courteous Office Action.

Claims 1-12 and 14-32 are pending in the application.

Claims 1-32 are rejected.

The Examiner helpfully indicated that claims 11 and 12 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. §112, 2nd paragraph, and to include all of the limitations of the base claim and any intervening claims.

Claims 1, 6, 7, 11, 14, and 19 are amended. It is respectfully submitted that no new matter is added.

Claim 13 is canceled without prejudice to the Applicants' right to present such claim in a continuing application at a later date.

Drawing Objections

The Examiner notes that where only a single view is used in an application to illustrate the claimed invention, it must not be numbered and the abbreviation "FIG." must not appear. See 37 CFR 1.84(u)(1).

The Examiner objected to the drawings under 37 CFR 1.83(a). The Examiner notes that the drawings must show every feature of the invention specified in the claims. Therefore, the "means for establishing a swirling or coanda flow" from claim 2 must be shown or the feature(s) canceled from the claim(s). Further, the Examiner finds that the "ultrasonic unit" from claim 13 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

The Applicants appreciate the Examiner's observations. The Examiner's attention is respectfully directed to the Replacement Sheet of the drawing submitted herewith where the abbreviation "FIG." has been removed therefrom.

With respect to the language "means for establishing a swirling or coanda flow" from claim 2, the Applicants respectfully submit that these means are shown in the Figure as flow chambers **14** and **16**. Support for this understanding may be found in the application as filed in the following locations:

Page 2, lines 29-33: "Preferably, the fluidising apparatus comprises a flow chamber having a fluid inlet and a fluid outlet, *means for establishing a swirling or coanda flow in a fluid passing out of the fluid outlet,* and a transport outlet for transporting fluidised material away from the flow chamber." (Emphasis added.)

Page 6, line 34 to page 7, line 5: "Each fluidising unit **10**, **12** comprises *a flow chamber **14**, **16** which imparts a swirling flow to fluid which is forced into the flow chamber **14**, **16** under pressure,* and a discharge opening **18**, **20** through which suspended solids, which have been fluidized by the fluidising units **10**, **12**, exit the tank **2** and hydro transport vessel **8**, respectively as a controlled slurry." (Emphasis added.)

Page 8, lines 24-27: "With the valves **V1** and **C1** fully closed, the fluid under pressure *passes into the flow chamber **14** of the fluidising unit **10** and is ejected as a swirling flow*, which fluidises the surrounding solids in the tank **2**." (Emphasis added.)

Page 9, lines 10-13: "A swirling flow of fluid is *discharged from the flow chamber **16** and fluidises the solids* in the bottom of the hydro transport vessel **8**." (Emphasis added.)

The Applicants respectfully submit that all of this language indicates that flow chambers **14** and **16** in the Figure are the "means for establishing a swirling or coanda flow".

With respect to the "ultrasonic unit", the Applicants respectfully direct the Examiner's attention to the fact that claim 13 has been canceled.

Thus, the Applicants respectfully submit that all of the drawing objections are overcome or avoided. Reconsideration is respectfully requested.

Specification Objection

The Examiner objected to the disclosure is because of the following informalities: page 1, line 32 recites "it may be that that the original storage tank" which appears to be a typo. Appropriate correction is required.

The Applicants appreciate the Examiner pointing out the inadvertent duplication of the word "that". The Examiner's attention is respectfully directed to the amendments to the specification herein where the second "that" has been deleted to overcome this problem.

Further, in a review of the specification the Applicants noted that on page 1, line 24, the word "efficiently" was inadvertently used instead of the correct word "efficiency". Additionally, the Applicants noted that on page 8, line 34 the word "compromises" was inadvertently used instead of the correct word "comprises". These inadvertent errors have also been corrected.

35 U.S.C. §112, Second Paragraph, Rejections

The Examiner has rejected claims 1-18 under 35 U.S.C. §112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The Examiner finds that claim 1 recites "Apparatus for transferring settled or suspended solids" which is indefinite. It is unclear to the Examiner whether the intended use of the apparatus is transferring settled solids, transferring suspended solids, or transferring both settled solids **and** suspended solids.

The Examiner rejected claims 2-18 under 35 U.S.C. 112, second paragraph, as being dependent on a rejected base claim.

The Examiner notes that claim 11 recites "a bypass line is provided to allow fluid from the open vessel to bypass the fluidising unit and to pass directly into the slurry discharge line." The Examiner finds that the applicant's disclosure describes only one line 26 from the open vessel 2, but line 26 does not bypass a fluidising unit. The applicant's disclosure does describe a bypass line 44 from the closed vessel, which bypasses fluidising unit 12 directly into slurry discharge line 4. The examiner believes that "open vessel" in claim 11 is a typo, and should be corrected to "closed vessel."

Regarding claim 2, element "means for establishing a swirling or coanda flow" the Examiner notes that this is a means (or step) plus function limitation that invokes 35 U.S.C. 112, sixth paragraph. However, the Examiner contends that the

written description fails to disclose the corresponding structure, material, or acts for the claimed function.

Regarding claim 6, the Examiner finds that element "means ... for controlling the rate at which solids are transferred" is a means (or step) plus function limitation that invokes 35 U.S.C. 112, sixth paragraph. However, the Examiner alleges that the written description fails to disclose the corresponding structure, material, or acts for the claimed function. The Examiner notes: simply reciting "software", "appropriate programming", or "an algorithm" (or in this case "computer 50") is insufficient disclosure of the corresponding structure for performing the claimed function.

Regarding claim 14, the Examiner asserts that element "means ... for controlling the flow rate and/or concentration of suspended solids" is a means (or step) plus function limitation that invokes 35 U.S.C. 112, sixth paragraph. However, the Examiner contends that the written description fails to disclose the corresponding structure, material, or acts for the claimed function. The Examiner notes: simply reciting "software", "appropriate programming", or "an algorithm" (or in this case "computer 50") is insufficient disclosure of the corresponding structure for performing the claimed function.

Applicant is required to:

a. Amend the claim so that the claim limitation will no longer be a means (or step) plus function limitation under 35 U.S.C. 112, sixth paragraph; or

b. Amend the written description of the specification such that it expressly recites what structure, material, or acts perform the claimed function without introducing any new matter (35 U.S.C. 132(a)).

The Applicants appreciate the Examiner pointing out these concerns.

With respect to the language "settled **or** suspended solids", the Examiner's attention is respectfully directed to the amendments to claims 1 and 19 where "or" has been changed to "and". That both settled and suspended (or fluidized) solids are originally intended to be encompassed may be understood from a review of

the specification as originally filed; for instance please see page 1, line 19 to page 2, line 11 (which happen to be excerpted above with respect to amendments to the specification), as well as page 8, line 12 to page 10, line 31; particularly page 8, lines 12-16, page 10, lines 29-31, and elsewhere.

With respect to claim 11, the Applicants appreciate the Examiner pointing out this problem and respectfully direct the Examiner's attention to claim 11 as amended herein where "open" has been changed to "closed" as helpfully suggested by the Examiner.

With respect to claim 2, as established above with respect to the drawing objections, the means for establishing a swirling or coanda flow in are shown in the Figure and recited in the written description as flow chambers **14** and **16.**

With respect to claim 6, the Examiner's attention is respectfully directed to the amendment to the claim where the "means" language has been deleted and replaced by "flow meter". The Applicants respectfully note that support for such an amendment may be found in the application as filed for instance in original dependent 7 and elsewhere, and thus such amendment does not constitute an improper insertion of new matter.

With respect to claim 14, the Examiner's attention is respectfully directed to the amendment to the claim where the "means" language has been deleted and replaced by "valves". The Applicants respectfully note that support for such an amendment may be found in the application as filed for instance on page 3, lines 32-35; page 7, lines 7-14 (discussion of valve **V1**) and elsewhere, and thus such amendment does not constitute an improper insertion of new matter.

The Applicants respectfully submit that for all of these reasons the rejections of the claims under 35 U.S.C. §112, second paragraph, are overcome or avoided. Reconsideration is respectfully requested.

35 U.S.C. §112, First Paragraph, Rejections of Claims 2-7 and 14-18

The Examiner has rejected claims 2-7 and 14-18 under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement. The Examiner contends that the claim(s) contains subject matter which was

not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 2, the Examiner notes element "means for establishing a swirling or coanda flow" is a means (or step) plus function limitation that invokes 35 U.S.C. 112, sixth paragraph. The Examiner contends that the written description only implicitly or inherently sets forth the corresponding structure, material, or acts that perform the claimed function.

Regarding claim 6, the Examiner notes element "means ... for controlling the rate at which solids are transferred" is a means (or step) plus function limitation that invokes 35 U.S.C. 112, sixth paragraph. The Examiner contends that the written description only implicitly or inherently sets forth the corresponding structure, material, or acts that perform the claimed function. The Examiner notes: simply reciting "software", "appropriate programming", or "an algorithm" (or in this case "computer 50") is insufficient disclosure of the corresponding structure for performing the claimed function.

Regarding claim 14, the Examiner notes element "means ... for controlling the flow rate and/or concentration of suspended solids" is a means (or step) plus function limitation that invokes 35 U.S.C. 112, sixth paragraph. The Examiner contends that the written description only implicitly or inherently sets forth the corresponding structure, material, or acts that perform the claimed function. The Examiner again notes: simply reciting "software", "appropriate programming", or "an algorithm" (or in this case "computer 50") is insufficient disclosure of the corresponding structure for performing the claimed function.

The Applicants respectfully traverse.

With respect to claim 2, as established above with respect to the drawing objections, the means for establishing a swirling or coanda flow are shown in the Figure and recited in the written description as flow chambers **14** and **16**. The Applicants thus respectfully submit that the subject matter in the claims is in fact described in the specification in such a way as to reasonably convey to one skilled

in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Such flow chambers for establishing a swirling or coanda flow are known in the art.

With respect to claim 6, the Examiner's attention is again respectfully directed to the amendment to the claim where the "means" language has been deleted and replaced by "flow meter". The Applicants once more respectfully note that support for such an amendment may be found in the application as filed for instance in original dependent 7 and elsewhere, and thus such amendment does not constitute an improper insertion of new matter.

With respect to claim 14, the Examiner's attention is again respectfully directed to the amendment to the claim where the "means" language has been deleted and replaced by "valves". The Applicants once more respectfully note that support for such an amendment may be found in the application as filed for instance on page 3, lines 32-35; page 7, lines 7-14 (discussion of valve **V1**) and elsewhere, and thus such amendment does not constitute an improper insertion of new matter.

The Applicants respectfully submit that for all of these reasons the rejections of the claims under 35 U.S.C. §112, first paragraph, are overcome or avoided. Reconsideration is respectfully requested.

35 U.S.C. §112, First Paragraph, Rejections of Claims 21 and 26-27

The Examiner has rejected claims 21 and 26-27 under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the enablement requirement. The claim(s) allegedly contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Consider claim 21. While the Examiner admits that the disclosure is enabling for a method in which fluid is recirculated between the closed vessel and the open vessel, the Examiner contends that the disclosure is not enabling for a method in which no additional fluid is added to or removed from the system. The Examiner alleges that the applicant discloses a lone method in which fluid is

added to the system by water tank 30 and pump 32, and in which fluid is removed from the system through slurry discharge line 4.

Consider claim 26. While the Examiner admits that the disclosure is enabling for a method in which fluid may be added to transport solids from the open vessel to the closed vessel, the Examiner contends that the disclosure is not enabling for a method in which no fluid other than the fluid in the open vessel is used to transport solids from the open vessel to the closed vessel. The Examiner alleges that the applicant discloses a lone method in which fluid from water tank 30 may travel through water supply line 34, bypass line 42, bypass line 40, and suction line 22, and may be used to transport solids from the open vessel to the closed vessel.

Consider claim 27. While the Examiner admits that the disclosure is enabling for a method in which fluid may be added to transport solids from the closed vessel to the discharge vessel, the Examiner contends that the disclosure is not enabling for a method in which no fluid other than the fluid in the open vessel is used to transport solids from the closed vessel to the discharge vessel. The Examiner alleges that the applicant discloses a lone method in which fluid from water tank 30 is used to transport solids from the closed vessel to the discharge vessel. It is possible that claim 27 contains a typo, but—as claim 27 is written—the examiner is unable to examine claim 27 in view of the prior art.

The Applicants respectfully traverse.

With respect to the method claim 21, the Applicants respectfully note that while page 8, lines 12-16 indicate that the apparatus is designed to operate continuously, it may also be operated as a batch or intermittent process. The Examiner's attention is respectfully directed to page 1, lines 19-27; page 4, lines 22-25 and line 34; and page 10, lines 14-31. In such a process, during the transporting of solids from the open vessel **2** to the intermediate vessel **6**, both valves **29** and valve **C2** are closed. The fluid containing solids will enter vessel **6** from solids feed line **26**. The majority of solids will remain in the vessel **6** and only

liquid will flow back to the open vessel **2** through suction line **22**. The Applicants thus respectfully submit that the embodiment in claim 21 is enabled.

With respect to method claim 26, the Applicants respectfully direct the Examiner's attention to page 5, lines 11-13 and the above descriptions of batch operation and further where it is understood that simply the only water used is that already in open vessel **2**. Please see particularly page 10, lines 14-31.

With respect to method claim 27, the Applicants respectfully direct the Examiner's attention to page 5, lines 15-17 and the above descriptions of batch operation and further where it is understood that simply the only water used is that already in open vessel **2**. It should be noted that fresh water from tank **30** is only needed for transporting solids from closed vessel **8** and that transporting solids from open vessel **2** to closed vessel **8** need not involve water from water tank **30**. Please note that the only place in the discussion of the operation of the continuous embodiment of water tank **30** is on page 9, lines 7-10.

Further, the Applicants note that the Examiner can readily understand from the Stinson reference how valves may be operated to allegedly practice the method of Applicants' method claims 21 and 26 and thus the Applicants respectfully submit that one having ordinary skill in the art would be enabled to operate the Applicants' apparatus in accordance with method claims 21, 26, and 27.

For all of these reasons the Applicants respectfully submit that claims 21, 26 and 27 are enabled by the specification as filed. Reconsideration is respectfully requested.

35 U.S.C. §102(b) Rejection

The Examiner has rejected claims 1-6, 19-21, 26, and 28-31 under 35 U.S.C. §102(b) as allegedly being anticipated by Stinson (Patent No. 2,941,783).

Consider claim 1. The Examiner alleges that Stinson teaches a suction line (17) from a supposed closed vessel (16, 37) to an open vessel (well 4) via drive means (pump 18), a solids feed line (31), and a fluidising apparatus (rotary drill bit 6).

Consider claims 2-5. The Examiner asserts that Stinson teaches a flow chamber (4), means for establishing a swirling or coanda flow (6), and a transport outlet (31) which is external to the flow chamber, situated directly above the flow chamber, and situated close to the flow chamber.

Consider claim 6. The Examiner finds that Stinson teaches means (valve 22) for controlling the rate at which solids are transferred from the open vessel to the closed vessel.

Consider claims 19-20. The Examiner contends that Stinson teaches drawing fluid from the supposedly closed vessel into the open vessel (via lines 17, 23, 24, 7) by means of a pump (18), operating a fluidising unit (rotary drill bit 6), and drawing fluid and fluidised solids from the open vessel into the closed vessel (via line 31).

Consider claim 21. The Examiner alleges that Stinson teaches that fluid (drilling mud 14) is recirculated between the supposed closed vessel (16, 37) and the open vessel (4). Stinson teaches valves 21, 38, 53, 54, 56, and 66 which can be closed so that no additional fluid is added to or removed from the system.

Consider claim 26. The Examiner finds that Stinson teaches valves 21, 38, 53, 54, 56, and 66 which can be closed so that no fluid other than the fluid in the open vessel is used to transport solids from the open vessel (4) to the closed vessel (16, 37).

Consider claims 28-31. The Examiner asserts that Stinson teaches a method which is capable of operating below sea level to remove material for transport to shore, capable of removing material from the seabed for dredging or mining, capable of removing radioactive waste solids, and capable of conveying material from the base of a mine shaft to the surface.

The Applicants respectfully traverse. A patent claim is anticipated, and therefore invalid, only when a single prior art reference discloses each and every limitation of the claim. *Glaxo Inc. v. Novopharm Ltd.,* 52 F.3d 1043, 1047, 34 U.S.P.Q.2d 1565 (Fed. Cir.), cert. denied, 116 S.Ct. 516 (1995).

The Applicants respectfully note that an objective of Stinson is to separate cuttings and mud and to reuse the mud during a drilling operation. The rotary bit is used to classify and separate cuttings from mud. The cuttings are dumped into a pile **37** for further treatment or disposal.

All of the Applicants' claims herein require and recite apparatus or methods transferring settled and suspended solids from an open vessel into a *closed* vessel. The Examiner contends that Stinson teaches a closed vessel at **16**, **37**. The Applicants respectfully submit that this is factually incorrect. In Stinson, **16** is a mud container or pit; **37** is a pile. Both are open. While mud container or pit **16** might arguably be called a "vessel" in a very broad sense of the word, it has no top surface or lid. The Applicants respectfully submit that pile **37** cannot be called a vessel at all as it is a pile of solid particles or cuttings on the ground. The Examiner's attention is respectfully directed to column 3, lines 7-33 of Stinson. That pit **16** is open at its top is evident from the description that the shale shaker **32** permits the "essential components of the mud, especially including the powdered solid weighting agent, such as barium sulfate, the finer sands, clays, and drill cuttings … together with the liquid in the drilling mud pass through screen **32** into the body of mud **14** in container **16**". That pit **16** is open is also seen from the Figure where make-up water is added to pit **16** through valve **67** (column 4, lines 12-19) and powdered mineral weighting agent is added thereto via underflow discharge outlet **52** (column 2, lines 57 to column 3, line 4).

The Applicants thus respectfully submit that because Stinson does not disclose each and every limitation of the claims, namely a *closed* vessel, the instant rejection should be withdrawn. Reconsideration is respectfully requested.

<u>35 U.S.C. §103(a) Rejection Over Stinson in view of Young, et al.</u>

The Examiner has rejected claims 7-10, 14-17, 22-25, and 32 under 35 U.S.C. 1 03(a) as allegedly being unpatentable over Stinson (Patent No. 2,941,783) in view of Young, et al. (Patent No. 5,098,667), hereafter referred to as Young.

Consider claim 7. The Examiner finds Stinson teaches means (valve 22) for controlling the rate at which solids are transferred from the open vessel to the closed vessel, but the Examiner admits that Stinson's means does not comprise a flow meter. The Examiner asserts that Young teaches using a flow meter (58, 56) in conjunction with a valve (78). The Examiner alleges that it would have been obvious to a person having ordinary skill in the art to modify Stinson's valve with Young's flow meter in order to provide closed-loop feedback control to the valve.

Consider claim 8. The Examiner contends that Stinson teaches a closed vessel (16, 37), but Stinson's closed vessel does not comprise a feed vessel. The Examiner alleges that Young teaches a feed vessel (40) which feeds solids into a transport vessel (20) containing a fluidising unit (stirrer 46). The Examiner contends that it would have been obvious to a person having ordinary skill in the art to modify Stinson's closed vessel with Young's feed vessel, transport vessel, and fluidising unit in order to convey the solids to a discharge vessel.

Consider claim 9. The Examiner admits that Stinson does not teach a transport vessel. The Examiner asserts that Young teaches a transport vessel (20) with a solids outlet (60) through which solids are discharged at a controlled rate along a slurry discharge line (labeled "TO REACTOR" in fig. 1). The Examiner contends that it would have been obvious to a person having ordinary skill in the art to modify Stinson's closed vessel with Young's transport vessel, solids outlet, and slurry discharge line in order to convey the solids to a discharge vessel.

Consider claim 10. The Examiner admits that Stinson does not teach means for measuring the flow rate of slurry discharge. The Examiner asserts that Young teaches means for measuring the flow rate of slurry discharge (58, 56). The Examiner alleges that it would have been obvious to a person having ordinary skill in the art to modify Stinson's closed vessel with Young's means for measuring flow rate in order to provide closed-loop feedback control to a control valve.

Consider claims 14-17. The Examiner asserts that Stinson teaches means (valve 22) for controlling the flow rate of suspended solids from the open vessel (4) to the closed vessel (16), but admits that it does not teach means for controlling the flow rate based on the flow rate of solids from the transport vessel. The

Examiner contends that Young teaches means (valve 16, computer 100, and flow meter 58, 56) for controlling the flow rate of suspended solids from an open vessel (10) to a closed vessel (40, 20) and means (valve 78, computer 100, and flow meter 58, 56) for controlling the flow rate of suspended solids from a transport vessel (20) based on the flow rate of suspended solids from the transport vessel (20) to maintain the solids content at a constant level (see column 5, lines 28-37). Young's flow meter 58, 56, in conjunction with gamma density gauge 74 and computer 100, is a mass flow meter as described in column 2, lines 7-12. The Examiner alleges that it would have been obvious to a person having ordinary skill in the art to modify Stinson's apparatus with Young's means of controlling flow rate in order to accurately convey a predetermined quantity of solids to a discharge vessel.

Consider claims 22-24. The Examiner admits that Stinson does not teach controlling the rate of discharge of solids from a closed vessel. Again, the Examiner asserts that Young teaches controlling the rate of discharge of solids from a closed vessel (20) to a discharge vessel (labeled "TO REACTOR" in fig. 1) via a valve (78) so that a desired concentration of solids is discharged at a constant rate (see column 5, lines 28-37). The Examiner contends that it would have been obvious to a person having ordinary skill in the art to modify Stinson's method with Young's step of controlling the rate of discharge of solids in order to accurately convey a predetermined quantity of solids to a discharge vessel.

Consider claim 25. The Examiner admits that Stinson does not teach fluidising the solids in the discharge vessel. The Examiner asserts that Young teaches fluidising the solids in the discharge vessel (via stirrer 46). The Examiner alleges that it would have been obvious to a person having ordinary skill in the art to modify Stinson's method with Young's step of fluidising the solids in the discharge vessel in order to convey the solids to a discharge vessel.

Consider claim 32. The Examiner admits that Stinson does not teach a method which is capable of conveying material directly into the suction line of a slurry pump. The Examiner contends that Stinson in view of Young teaches a method capable of conveying material directly into the suction line of a slurry

pump at concentrations matched to the pump's characteristics (see column 5, lines 28-37). The Examiner alleges that it would have been obvious to a person having ordinary skill in the art to modify Stinson's method with Young's capability of conveying directly into the suction line of a slurry pump in order to convey the solids to a discharge vessel at a higher elevation.

The Applicants respectfully traverse. The Applicants submit that it is the Examiner's burden to establish a case of *prima facie* obviousness of the pending claims. *In re Oeticker,* 977 F.2d 1443, 1445; 24 U.S.P.Q.2d 1443 (Fed. Cir. 1992), and that as will be established, a *prima facie* case of obviousness has not been made herein.

As established above with respect to the 35 U.S.C. §102(b) rejection, Stinson is deficient in its teachings for more reasons than what the Examiner admits, in particular it does not teach or suggest a *closed* vessel as required by the instant claims. Neither mud container or pit **16** nor pile **37** therein is a closed vessel. The Applicants further respectfully submit that Stinson does not teach or suggest modifying mud container or pit **16** or pile **37** to be a closed container. Further, the Applicants respectfully submit that Young, et al. does not teach or suggest modifying the mud container or pit **16** or pile **37** of Stinson to be a closed container.

Indeed, the Examiner contends that Young, et al. teaches a feed vessel **40**. However, the Applicants respectfully submit that this is incorrect. In Young, et al. **40** refers to a conduit means, not a vessel. Further, the Applicants respectfully submit that Young, et al. does not teach, hint or suggest modifying their conduit means **40** to be a vessel of any type.

The Applicants respectfully submit that there is no teaching or suggestion in either reference to modify the Stinson teachings to involve a closed vessel, nor would it have been obvious to a person having ordinary skill in the art to modify Stinson's closed vessel with Young's feed vessel, transport vessel, and fluidising unit in order to convey the solids to a discharge vessel, since Stinson does not teach or suggest a closed vessel.

Additionally, Young, et al. involve pumping diluted, suspended catalyst particles (column 2, lines 3-12; claims; etc.). In order to pump catalyst particles to the polymerization reactor, these catalyst particles must be suspended and dilute in mix tank **20**. To achieve these objectives, diluents are added to mix tank **20** and stirrers **46** are used to make sure that the catalyst particles are in suspension without causing the plugging of the pump. In contrast, the present claims involve both suspended solids and *settled* solids. Pumps in the Applicants' apparatus and method pump water only, not slurry as taught by Young, et al. The water under pressure used in conjunction with the Applicants' flow chambers **14** and **16** (*e.g.* means for establishing a swirling or coanda flow) to fluidize the solids to be transported. No stirrers **46** are needed to keep the solids in suspension as required by Young, et al. In other words, Young, et al.'s stirrers **46** are not equivalent or analogous to Applicants flow chambers **14** and **16** because Young, et al.'s stirrers **46** still require their pumps to transport the catalyst solids therein.

For all of these reasons the Applicants respectfully submit that the Examiner has not established a *prima facie* rejection of the claims under 35 U.S.C. §103(a), and thus the instant rejection should be withdrawn. Reconsideration is respectfully requested.

<u>35 U.S.C. §103(a) Rejection Over Stinson in view of Young, et al. and Muralidhara, et al.</u>

The Examiner rejected claim 13 under 35 U.S.C. §103(a) as allegedly being unpatentable over Stinson (Patent No. 2,941,783) in view of Young (Patent No. 5,098,667) as applied to claim 9 above, and further in view of Muralidhara et al. (Patent No. 4,802,964), hereafter referred to as Muralidhara.

The Applicants respectfully noted that claim 13 has been canceled herein and thus the Applicants respectfully submit that the instant rejection is rendered moot. Reconsideration is respectfully requested.

35 U.S.C. §103(a) Rejection Over Stinson in view of Young, et al. and Gomi, et al.

The Examiner rejected claim 18 under 35 U.S.C. 103(a) as allegedly being unpatentable over Stinson (Patent No. 2,941,783) in view of Young (Patent No. 5,098,667) as applied to claim 17 above, and further in view of Gomi, et al. (Patent No. 5,796,012), hereafter referred to as Gomi.

Consider claim 18. The Examiner notes that Stinson in view of Young teaches a flow meter, but admits that this combination does not explicitly state whether the flow meter is a coriolis or ultrasonic meter. The Examiner finds that Gomi teaches a coriolis flow meter. The Examiner contends that it would have been obvious to a person having ordinary skill in the art to modify the flow meter of Stinson in view of Young with Gomi's coriolis flow meter in order to correct instrumental errors caused by a change in density and temperature of the fluid (see Gomi, abstract, lines 1-3).

Once more, the Applicants respectfully traverse. The Applicant submits again that it is the Examiner's burden to establish a case of *prima facie* obviousness of the pending claims. *In re Oeticker, id*, and that as will be established, a *prima facie* case of obviousness has not been made herein.

The Applicants again respectfully note that as established previously, Stinson does not disclose, teach or suggest an apparatus or method of transferring settled and suspended solids from an open vessel to a closed vessel as Stinson does not teach or suggest a closed vessel, nor do Stinson or Young, et al. hint, suggest or teach modifying the mud container or pit **16** or pile **37** of Stinson to be a *closed* vessel. The Applicants further respectfully submit that Gomi, et al. also does not teach, suggest or hint at such a modification. The supposed closed vessel of Young, et al. **40** is in fact a conduit means, not a vessel.

Thus, the Applicants again respectfully submit that a *prima facie* rejection of this claim over the references has not been established and that the rejection should be withdrawn. Reconsideration is respectfully requested.

It is respectfully submitted that the amendments and arguments presented above place the claims in condition for allowance. Reconsideration and allowance of the claims are respectfully requested. The Examiner is respectfully reminded of his duty to indicate allowable subject matter. The Examiner is invited to call the Applicants' attorney at the number below for any reason, especially any reason that may help advance the prosecution.

Respectfully submitted,
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